## Amendments to the Claims

1-18. (canceled)

19. (currently amended) A method of injecting a defined volume of sample into an electrolyte channel in a microfluidics device, comprising

placing a sample in a sample channel that intersects the electrolyte channel at a supply port,

injecting the sample in the sample channel along a pathway that includes the supply port, a drain port intersecting the electrolyte channel at location axially spaced from the ~~first~~supply port, and a segment of the electrolyte channel between the two ports, where the sample volume is defined as the region of the electrolyte channel extending between and along the two ports, by applying an electric field across the ~~supply~~sample channel and a drain channels,

by said injecting, producing a defined sample volume in the electrolyte channel, and

electrokinetically moving the defined sample volume along the electrolyte channel by applying an electric field across a reservoir for the electrolyte buffer and a drain at an opposite end of the electrolyte channel.

20. (previously presented) The method of claim 19, wherein, during said moving, subjecting said supply and drain channels to an electric potential which is different from the electric potential at the reservoir for the electrolyte buffer, thus establishing a potential difference such that the electrolyte buffer is allowed to advance into said supply channel and into said drain channel.

21. (previously presented) The method of claim 20, wherein said potential difference is chosen such that a resultant electric field strength amounts to at least about 0.1 V/cm.